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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,850	05/17/2007	Thomas Schlosser	294077US0PCT	1996
22850	7590	06/10/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			SCOTT, ANGELA C	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			06/10/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/588,850	Applicant(s) SCHLOSSER ET AL.	
	Examiner Angela C. Scott	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,10,12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,10,12 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 6-7, and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the proportion of component (ii)" in line 4. There is insufficient antecedent basis for this limitation in the claim. However, for the purpose of further examination, this phrase has been interpreted to mean "the proportion of the maleic-anhydride-modified-polyolefin."

Claim 6 recites the limitation "the filler content" in line 4. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this claim has been interpreted to further add a filler to the compound of claim 1 in the claimed percent by weight.

Claim 7 recites the limitation "the content of component (iv)" in line 4. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this phrase has been interpreted to mean "the content of the at least one amino-functional silicone compound."

Claim 9 recites the limitation "components (i), (ii), (iii), (iv) and, where appropriate, (v)" in line 4. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, claim 9 has been interpreted to depend from claim 2 which defines all of the above components.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberts et al. (US 6,288,144).

Regarding claims 1-2 and 4-5, Roberts et al. teaches a filled polyolefin compound (Col. 4, line 7) comprising a polypropylene base polymer (Col. 4, lines 52-67), a maleic-anhydride-modified polypropylene (Col. 8, lines 20-30 and Col. 6, lines 40-50), a filler such as aluminum hydroxide or magnesium hydroxide (Col. 4, lines 34-51), a polydiorganosiloxane containing at least one polar moiety such as an amino moiety (Col. 10, lines 1-50) (corresponds to Formula IV), and other additives such as stabilizers and processing aids (Col. 11, lines 15-20).

Regarding claim 3, Roberts et al. teaches that the maleic anhydride grafted polypropylene is used in a content of 5% of the total compound (Table 1).

Regarding claim 6, Roberts et al. teaches that the filler is used in an amount of about 1 to about 100 parts by weight based on the total weight of polyolefin (Col. 4, lines 35-41).

Regarding claim 7, Roberts et al. teaches that the organo-modified polysiloxane is used in an amount of from about 0.01 to about 1.0 percent by weight based upon the total weight of the final polymeric material (Col. 4, lines 25-30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. (US 6,288,144) as applied above, and further in view of Schlosser et al. (US 2003/0134969) and Kaprinidis (US 2003/0220422).

Roberts et al. teaches the composition as described above. Roberts et al. also teaches mixing all of the compound ingredients together in a suitable mixer, such as an extruder, and making a melt (Col. 11, lines 3-9).

Roberts et al. does not teach heating the mixing assembly. However, Schlosser et al. does teach making filled cable compounds and heating the mixture to a temperature above the melting point of the base polymer (§60). Roberts et al. and Schlosser et al. are combinable because they are from the same field of endeavor, namely that of filled polyolefin compounds. At the time of the invention, a person of ordinary skill in the art would have found it obvious to heat the compound during mixing, as taught by Schlosser et al., as part of the process in making the composition, as taught by Roberts et al., and would have been motivated to do so because heating the mixture to above the melting point of the base polymer helps with thorough mixing of the components.

Roberts et al. does not teach that the compound is formed into pellets. However, Kaprinidis does teach making polypropylene compounds and forming them into pellets after mixing (§413). Roberts et al. and Kaprinidis are combinable because they are from the same field of endeavor, namely that of flame retardant polypropylene compositions. At the time of the invention, a person of ordinary skill in the art would have found it obvious to form the finished compound into pellets, as taught by Kaprinidis, and would have been motivated to do so because the pellets can then be processed into many useful articles through a variety of methods (§413).

Moreover, at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Roberts et al., Schlosser et al., and Kaprinidis because they are all from the same field of endeavor, namely that of flame retardant and filled polyolefin compositions.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. (US 6,288,144) as applied to claim 1 above, and further in view of Chaillie et al. (DE 195 42 157). For convenience, the citations below are taken from an English language machine translation of Chaillie et al., included herewith.

Roberts et al. teaches the composition of claim 1. Roberts et al. does not teach that the compound can be used for cables, which are also polyolefin moldings. However, Chaillie et al. does teach a polymer based mixture of maleic acid anhydride grafted polyethylene and silicone oil that is used for cables (Example I and Page 1, lines 4-5). Roberts et al. and Chaillie et al. are combinable because they are from the same field of endeavor, namely that of filled polyethylene or polypropylene compounds. At the time of the invention, a person of ordinary skill in the art would have found it obvious to use the composition, as taught by Roberts et al., to make cables, as taught by Chaillie et al., and would have been motivated to do so because the compounds of the references are similar and it is advantageous to make cables from a flame-retardant compound.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela C. Scott whose telephone number is (571) 270-3303. The examiner can normally be reached on Monday through Friday, 8:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harold Y Pyon/
Supervisory Patent Examiner, Art Unit 1796

/A. C. S./
Examiner, Art Unit 1796